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09/29/2003

Petros Belimpasakis

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EXAMINER

CHEEMA, UMAR

ART UNIT

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2144

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/675,913

**Applicant(s)**

BELIMPASAKIS, PETROS

**Examiner**

UMAR CHEEMA

**Art Unit**

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 April 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30, 33 and 35 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-30, 33 and 35 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/808)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

This is a response to the Amendment filed on 04/28/2008. Claims 1-3, 5, 7, 14, 16-30 and 33 are amended. Claims 31-32 and 34 are canceled, and new claim 35 is added. Claims 1-30, 33 and 35 are pending.

Applicant's arguments, see remarks, filed 04/28/2008, with respect to 35 U.S.C. 101 Rejection have been fully considered and are persuasive. The 35 U.S.C. 101 Rejection of claims 16-33 has been withdrawn in view of amendment.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-30, 33 and 35 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-30, 33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi et al. (Takagi) (US Patent # 6,091,733) in view of Olin et al (Olin) (US 2004/0005878).

Regarding claim 1, Takagi substantially discloses the invention as claimed a method comprising: selecting an access point among a plurality of access points for establishing a communication connection between a terminal device and a network using said access point, said terminal device communicating with said network by using a layered protocol stack comprising a transport layer, and said terminal device having a plurality of application clients each accessing the network using a respective access point of said plurality of access points; and establishing the communication connection between the terminal device and the network through a transport layer proxy (see abstract, col. 3, lines 50-65, figure 2 and the related details, col. 1, lines 65-col. 2 line 29; transport data unit containing data as contained in the first transport layer protocol data unit and a second interface for outputting the second transport layer protocol data unit to a network).

Takagi substantially discloses the invention as claimed for the given reason above but does not explicitly disclose wherein selecting an access point is among a plurality of access points and wherein plurality of application clients each accessing the network using a respective access point of said plurality of access points. However in the same field of invention Olin discloses wherein selecting an access point is among a plurality of access points and where plurality of application clients each accessing the

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network using a respective access point of said plurality of access points (see abstract, par. 0008-0010, figures 1-3 and the details related).

It would have been obvious to one of the ordinary skill person in the art of networking to combine the teaching of Takagi and Olin for a transport layer communication system. Motivation for doing so would have been that the system makes communication between multiple access points easier and better (see Olin: par. 0010).

Regarding claim 2, Takagi discloses the method of claim 1, wherein the communication connection of terminal device and the network is via an air interface (see col. 3, lines 50-59, figure 2 (IF interface\_500,510)).

Regarding claim 3, Takagi discloses the method of claim 1, wherein the communication connection between the terminal device and the network comprises: a local transport layer connection between the application client associated with the selected access point and the transport layer proxy, and a further transport layer connection between the transport layer proxy and remote server through the access point (see col. 4, lines 45-57, col. 9, lines 32-39).

Regarding claim 4, Takagi discloses the method of claim 3, wherein the local transport layer connection and the further transport layer connection are client-server based connections (see col. 8, lines 22-25; figures 9-10; communication between server

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terminal and client terminal).

Regarding claim 5, Takagi discloses the method of claim 1, wherein the transport layer proxy provides at least one additional service for the application client or for the user of the device (see col. 6, lines 9-17).

Regarding claim 6, Takagi discloses the method of claim 5, wherein the provided additional service comprises selecting a network interface to be used in the case where more than one network interface is available (see col. 2, lines 5-15).

Regarding claim 7, Takagi discloses the method of claim 5, wherein the provided additional service comprises a service for selecting a bearer for crossing an air interface (see col. 3, lines 50-59, figure 2).

Regarding claim 8, Takagi discloses the method of claim 7, wherein the bearer operates in the protocol stack on a layer lower than the transport layer (see col. 6, lines 9-17).

Regarding claim 9, Takagi discloses the method of claim 6, wherein the selection of a network interface or a bearer is performed based on information which comprises at least one of the following: network availability, user-defined rules, time, location, cost (see col. 6, lines 20-25; time period required for transmitting the segments).

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Regarding claim 10, Takagi discloses the method of claim 5, wherein the provided additional service comprises providing a network interface not natively supported by an operating system of the device (see col. 1, lines 66-67, col. 2, lines 1-4).

Regarding claim 11, Takagi discloses the method of claim 5, wherein the provided additional service comprises providing support for multiple users (see col. 1, lines 38-40; server to clients).

Regarding claim 12, Takagi discloses the method of claim 11, wherein support for multiple users is implemented via a set of predefined user profiles (see col. 5, lines 63-67).

Regarding claim 13, Takagi discloses the method of claim 5, wherein the provided additional service comprises receiving information indicative of a change in a remote server address and modifying the remote server address at the communication device by the second software application, whereby no modification in the first software application is needed (see col. 4, lines 45-57, col. 9, lines 32-50).

Regarding claim 14, Takagi discloses the method of claim 1, wherein the application client is an e-mail client, web browser or another end-user application (see col. 1, lines 10-16, figure 1).

Regarding claim 15, Takagi discloses the method of claim 1, wherein the transport layer is implemented by Transmission Control Protocol (see col. 4, lines 4-6, figure 3; TCP relay unit).

Regarding claim 16, Takagi substantially discloses the invention as claimed an apparatus, comprising: a plurality of access interface configured to connect the apparatus with a network; a storage medium configured to store a plurality of application clients for use by the apparatus, wherein each client is configured to access the network using a respective access interface of said plurality of access interfaces; and a proxy module configured to select an access interface among the plurality of access interfaces, and to connect the apparatus with the network through said proxy module, wherein said apparatus is capable of communicating with said network by using a layered protocol stack comprising a transport layer, and said proxy is a transport layer proxy (see abstract, col. 3, lines 50-65, figure 2 and the related details, col. 1, lines 65-col. 2 line 29; transport data unit containing data as contained in the first transport layer protocol data unit and a second interface for outputting the second transport layer protocol data unit to a network).

Takagi substantially discloses the invention as claimed for the given reason above but does not explicitly disclose wherein said plurality of access points and wherein plurality of application clients each accessing the network using a respective access point of said plurality of access points. However in the same field of invention Olin discloses wherein said plurality of access points and where plurality of application



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clients each accessing the network using a respective access point of said plurality of access points (see abstract, par. 0008-0010, figures 1-3 and the details related).

It would have been obvious to one of the ordinary skill person in the art of networking to combine the teaching of Takagi and Olin for a transport layer communication system. Motivation for doing so would have been that the system makes communication between multiple access points easier and better (see Olin: par. 0010).

Regarding claim 17, the limitations of this claim has already been addressed (see claim 2 above).

Regarding claim 18, the limitations of this claim has already been addressed (see claim 3 above).

Regarding claim 19, the limitations of this claim has already been addressed (see claim 4 above).

Regarding claim 20, the limitations of this claim has already been addressed (see claim 5 above).

Regarding claim 21, the limitations of this claim has already been addressed (see claim 6 above).

Regarding claim 22, the limitations of this claim has already been addressed (see claim 7 above).

Regarding claim 23, the limitations of this claim has already been addressed (see claim 8 above).

Regarding claim 24, the limitations of this claim has already been addressed (see claim 9 above).

Regarding claim 25, the limitations of this claim has already been addressed (see claim 10 above).

Regarding claim 26, the limitations of this claim has already been addressed (see claim 11 above).

Regarding claim 27, the limitations of this claim has already been addressed (see claim 12 above).

Regarding claim 28, the limitations of this claim has already been addressed (see claim 13 above).

Regarding claim 29, the limitations of this claim has already been addressed (see claim 14 above).

Regarding claim 30, the limitations of this claim has already been addressed (see claim 15 above).

Regarding claim 33, Takagi substantially discloses the invention as claimed a computer program product comprising a computer readable storage medium storing program thereon executable by a transport layer proxy in a communication device, wherein the program code comprising: instructions for selecting an access point among a plurality of access points for establishing a communication connection between the communication device and a network using said access point, said communication device communicating with said network by using a layered protocol stack comprising a transport layer, and said communication device having a plurality of application clients each accessing the network using a respective access point of said plurality of access points; and instructions for establishing the communication connection between the communication device and the network through the transport layer proxy (see abstract, col. 3, lines 50-65, figure 2 and the related details, col. 1, lines 65-col. 2 line 29; transport data unit containing data as contained in the first transport layer protocol data unit and a second interface for outputting the second transport layer protocol data unit to a network).

Takagi substantially discloses the invention as claimed for the given reason above but does not explicitly disclose wherein said plurality of access points and wherein plurality of application clients each accessing the network using a respective access point of said plurality of access points. However in the same field of invention Olin discloses wherein said plurality of access points and where plurality of application clients each accessing the network using a respective access point of said plurality of access points (see abstract, par. 0008-0010, figures 1-3 and the details related).

It would have been obvious to one of the ordinary skill person in the art of networking to combine the teaching of Takagi and Olin for a transport layer communication system. Motivation for doing so would have been that the system makes communication between multiple access points easier and better (see Olin: par. 0010).

Regarding claim 35, Takagi substantially discloses the invention as claimed an apparatus, comprising: a plurality of access points for connecting the apparatus with a network; means for storing a plurality of application clients for use by the apparatus, each client accessing the network using a respective access points of said plurality of access points; and a proxy for selecting an access point among the plurality of access points, and for connecting the apparatus with the network through the proxy, wherein said apparatus is capable of communicating with said network by using a layered protocol stack comprising a transport layer, and said proxy is a transport layer proxy (see abstract, col. 3, lines 50-65, figure 2 and the related details, col. 1, lines 65-col. 2

line 29; transport data unit containing data as contained in the first transport layer protocol data unit and a second interface for outputting the second transport layer protocol data unit to a network).

Takagi substantially discloses the invention as claimed for the given reason above but does not explicitly disclose wherein said plurality of access points and wherein plurality of application clients each accessing the network using a respective access point of said plurality of access points. However in the same field of invention Olin discloses wherein said plurality of access points and where plurality of application clients each accessing the network using a respective access point of said plurality of access points (see abstract, par. 0008-0010, figures 1-3 and the details related).

It would have been obvious to one of the ordinary skill person in the art of networking to combine the teaching of Takagi and Olin for a transport layer communication system. Motivation for doing so would have been that the system makes communication between multiple access points easier and better (see Olin: par. 0010).

**Examiner's Note:** Examiner has cited particular paragraphs, figures, columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully

consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **UMAR CHEEMA** whose telephone number is (571)270-3037. The examiner can normally be reached on **M-F 8:00AM-5:00PM**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Jr. Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Uc  
/William C. Vaughn, Jr./  
Supervisory Patent Examiner, Art Unit 2144